

JULY 2006 WEATHER SUMMARY

RIVERSIDE FIRE WEATHER CENTER

Predictive Services Unit

INTRODUCTION

A strong ridge of high pressure over the southwestern states brought well above normal temperatures to most of the region during July. However, a strong Pacific trough brought well below normal temperatures during the last few days of the month. Southeast flow aloft brought isolated to scattered showers and thunderstorms mainly to the mountains and deserts during most of the month. The only days that there were no thunderstorms in the region were from July 11th – July 14th. There were also some showers over Southern California from the mountains westward from a deep marine layer the last couple days of the month. Winds were mainly southerly with no strong offshore wind events during the month, except for short periods of gusty winds associated with strong thunderstorms.

TEMPERATURES

Most of July was dominated by well above normal temperatures as a strong ridge of high pressure sat over the southwestern states. However, a strong Pacific trough for this time of year dropped south off the West Coast bringing well below normal temperatures during the last few days of the month. Across Southern California, many valley locations had maximum temperatures in the upper 90s to 115 with the ridge of high pressure and 80s to low 90s with the Pacific trough. Normally the valley locations of Southern California are in the low to mid 90s the entire month. For the month, maximum temperatures were generally well above normal, with only a couple of isolated areas below normal (**Fig 1**). Following are some of the records at our climate station on the UC campus in Riverside: tied the highest maximum temperature on record on July 22nd with 117 degrees, tied a daily high maximum temperature of 108 degrees on July 14th and 108 degrees on July 21st, set the highest minimum temperature on record on July 22nd with 81 degrees, set a daily high minimum temperature of 69 degrees on July 2nd, 74 degrees on July 16th, 73 degrees on July 17th, 72 degrees on July 18th, 79 degrees on July 23rd, 74 degrees on July 24th, 75 degrees on July 25th, and 73 degrees on July 26th, tied a daily high minimum temperature of 68 degrees on July 1st and 69 degrees on July 3rd. At the end of the month temperatures cooled dramatically and Riverside set a daily low maximum temperature on July 30th with 85 degrees. Overall, this was the hottest month of any month on record at Riverside.

Av. Max. Temperature dep from Ave (deg F)
7/1/2006 – 7/27/2006

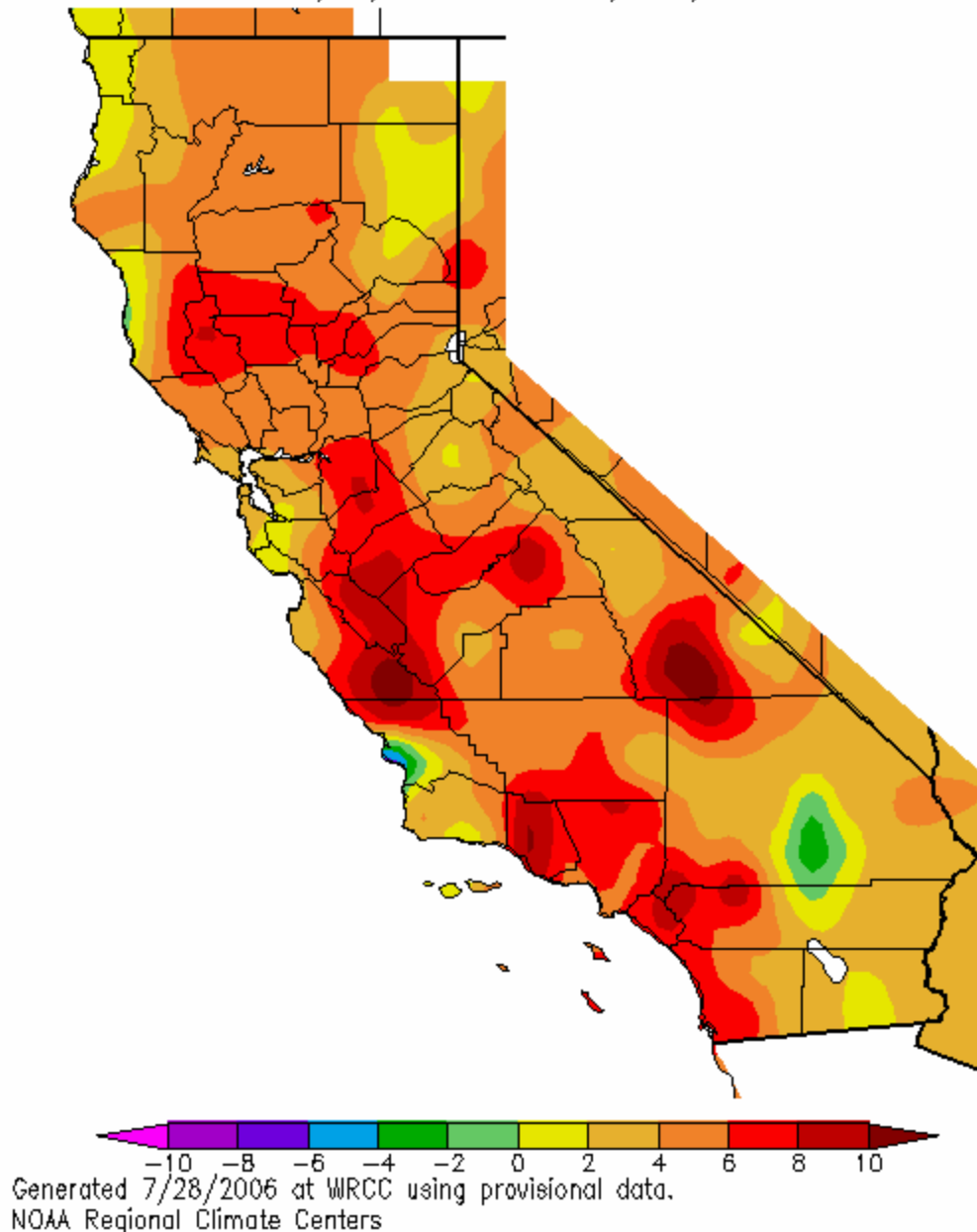


Fig 1.

PRECIPITATION

There were no widespread precipitation events in July. Southeast flow aloft brought isolated to scattered showers and thunderstorms to mainly the mountains and deserts most of the month. However, some showers and thunderstorms made it all the way to the coast on a few days. The only days that there were no thunderstorms in the region were from July 11th – July 14th. Some Sierra locations picked up between 1 and 2 inches of rainfall during the month, but most mountain and desert locations picked up less than a quarter

inch of rainfall (**Fig 2.**). The trough dropping south along the West Coast late in the month brought a deep marine layer to Southern California with some showers from the mountains westward. Most locations picked up less than a tenth of an inch of rainfall during this period. Riverside tied a daily record rainfall on July 22nd with 0.01 inches. Riverside received 0.03 inches of rainfall for the month, which is exactly normal for the month.

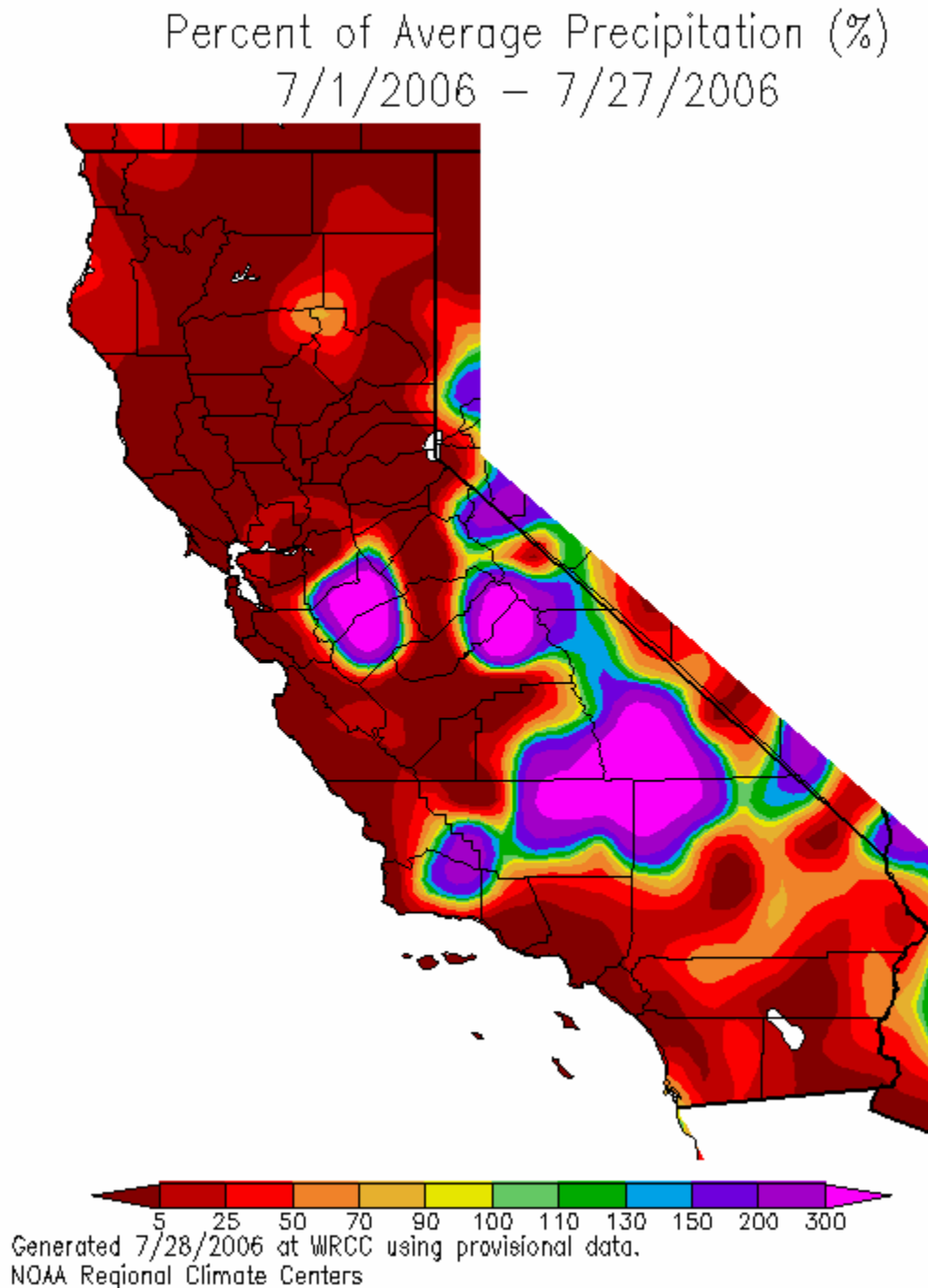


Fig 2.

WINDS

Winds were mostly southerly the entire month. Southerly afternoon winds were mainly between 5 and 15 mph. However, the trough at the end of the month brought southerly afternoon winds over some mountain and desert locations to 12 to 25 mph with gusts in the 30s. There were no strong offshore wind events during the month. There were areas of brief, gusty winds associated with strong thunderstorms.

FIRES

This was a very busy month with respect to wildfires. Per the ICS-209 reports, there were a total of 41 fires this month that burned approximately 134,617 acres. Although there were ignitions almost every day of the month (except for the last three days of the month), the largest outbreak of fires occurred between the 19th and 26th of the month. During this period there were 20 major fires, of which 14 of them were large fires. There were numerous complexes consisting of multiple fires in the same general area. Large fires occurred in all of our Predictive Service Areas, except for the three Sierra PSA's. Of the 41 significant fires this month, at least half of them were caused by lightning. Lightning began starting fires on the 1st day of the month, and continued nearly non-stop through the 25th of the month. This was a very unusually long period of thunderstorms consisting of some dry lightning. Fuel conditions were such that lightning became a very efficient igniter this month.

CONCLUSION

Overall, July had well above normal temperatures. For many locations this was the hottest month on record. Many locations broke daily high maximum and minimum temperature records. Numerous monthly records were also broken. Many high minimum temperature records over the southern portions of the region were the result of very warm sea surface temperatures along the coast (as much as 10 degrees above normal). Precipitation was above normal over most of the Sierra and northern deserts locations. Otherwise, precipitation was near to below normal. Winds were mainly southerly with no strong offshore wind events during the month. With respect to wildfires, it was a extremely busy month, with only a few days without significant fire activity.